IN THE SPECIFICATION:

Please replace paragraph 4 at page 2 continuing onto page 3, with the following rewritten paragraph:

An information-signal-processing apparatus according to the invention has plural functional blocks each for processing an information signal, and a control block for controlling operations of the plural functional blocks, wherein the control block or a predetermined ~~functional~~ block of the control block and the plural functional blocks issues a common command, and each of the plural functional blocks adaptively operates in accordance with the issued common command.

Please replace paragraphs 1 and 4 at page 3 continuing onto page 4, with the following rewritten paragraphs:

A functional block control method according to the invention has the steps of transmitting a common command to plural functional blocks, respectively, used to process an information signal from a control block or from a predetermined ~~functional~~ block of the control block and the plural functional blocks, and adaptively operating the plural functional blocks in accordance with the common command.

The control block or a predetermined ~~functional~~ block of the control block and the plural functional blocks issues a common command. For example, such a common-command-issuing functional block issues such a common command as to include results of processing an information signal. This common command is sent to the plural functional blocks via, for example, the above-described control bus. Each of the plural functional blocks operates

adaptively in response to the common command. In this case, in these functional blocks, a signal path or signal processing changes in accordance with the common command.

Please replace paragraph 1 at page 8, with the following rewritten paragraph:

FIG. 7 is an explanatory diagram for explaining operations of a DRC circuit and a ~~child-screen~~ OSD circuit when a zoom magnification or a zoom position is changed;

Please replace paragraph 2 at page 12, with the following rewritten paragraph:

Further, the chassis 101 incorporates, for example, a microcomputer, having a system control block 110 for controlling operations of the apparatus as a whole, an input selector substrate 122 (hereinafter referred to as "input selector 122" simply) as functional block 2, a signal router (matrix switch) substrate 123 (hereinafter referred to as "signal router 123" simply) as functional block 3, and a ~~child-screen~~ OSD circuit substrate 128 (hereinafter referred to as "~~child-screen~~ OSD circuit 128" simply) as functional block 8.

Please replace paragraph 3 at page 15, with the following rewritten paragraph:

The control connectors 120a for the above-described input selector 122 (as the functional block 2), signal router 123 (as the functional block 3), and the ~~child-screen~~ OSD circuit 128 (as the functional block 8) are respectively connected to the system control block 110 via the control bus 111.

Please replace paragraphs 2 and 4 at page 16 continuing onto page 17, with the following rewritten paragraphs:

Further, the ~~child-screen~~ OSD circuit 128 (as the functional block 8) selectively uses image signals from the input selector 122 and the signal router 123. Therefore, this ~~child-screen~~ OSD circuit 128 has two input terminals for the input connector 120b and one output terminal for the output connector 120c.

Further, the connector 102a is connected to a third input terminal of the input connector 120b of the input selector 122 (as the functional block 2). The connector 102b is connected to an input connector of the slot 104b, whose output connector is connected to a second input terminal of the input connector 120b of the input selector 122. The connector 102c is connected to an input connector of the slot 104a, whose output connector is connected to a first input terminal of the input connector 120b of the input selector 122. Further, one output terminal of the output connector 120c of the input selector 122 is connected to a first input terminal of the input connector 120b of the signal router 123 (as the functional block 3) and a second input terminal of the input connector 120b of the ~~child-screen~~ OSD circuit 128 (as the functional block 8).

Please replace paragraph 2 at page 17, with the following rewritten paragraph:

Further, a fourth output terminal of the output connector 120c of the signal router 123 is connected to a first input terminal of the input connector 120b of the ~~child-screen~~ OSD circuit 128, while one output terminal of the output connector 120c of this ~~child-screen~~ OSD circuit 128 is connected to the connector 103.

Please replace paragraph 1 at page 19, with the following rewritten paragraph:

In the input selector 122 (as the functional block 2), the functional section 120e selectively outputs to one of the output terminals of the output connector 120c any one of the first to the third image signals that are input respectively to the three input terminals of the input connector 120b. In this case, the first input terminal is supplied with an image signal (input 1) output from the U/V tuner 121 (as the functional block 1). The second input terminal is supplied with an image signal (input 2) output from the digital terrestrial tuner 126 (as the functional block 6). The third input terminal is supplied with an image signal (input 3) as an external video input that is applied to the connector 102a. The image signal provided to the output terminal is supplied to the signal router 123 (as the functional block 3) as well as to the ~~child-screen~~ OSD circuit 128.

Please replace paragraph 1 at page 21, with the following rewritten paragraph:

Further, the image signal (output 1=o1) output to the first output terminal is supplied to the DRC circuit 124 (as the functional block 4). The image signal (output 2=o2) output to the second output terminal is supplied to the panel-dedicated processing circuit 125 (as the functional block 5). The image signal (output 3=o3) output to the third output terminal is supplied to the noise removal circuit 127. The image signal (output 4=o4) output to the fourth output terminal is supplied to the ~~child-screen~~ OSD circuit 128.

Please replace paragraphs 2, 3 and 4 at page 28 continuing onto page 29, with the following rewritten paragraphs:

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of the DRC circuit 124 stores common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) meaning adjustment of DRC zoom ratio and zoom center position and intra-functional-block commands, ~~zoom(ratioVal,holizontalVal,verticalVal)~~ zoom(ratioVal,horizontalVal,verticalVal) meaning substitution of DRC zoom ratio and zoom center position in a condition where they are correlated with each other.

The common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) are delivered from the system control block 110 to the control bus 111 when the user operates the remote-control transmitter 112 or the operation section 113 in the chassis 101 to change a zoom ratio and a zoom center position. In this case, "ratioVal" indicates a zoom ratio, "~~holizontalVal~~ horizontalVal" indicates a horizontal x-coordinate of a zoom center position, and "verticalVal" indicates a vertical y-coordinate of the zoom center position.

In this case, when the control port 120d-1 receives the common command ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), the interpreter 120d-3 in the control I/F 120d of the DRC circuit 124 converts this common command ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) into intra-functional-block command, ~~zoom(ratioVal, holizontalVal,verticalVal)~~ zoom(ratioVal, horizontalVal,verticalVal) based on

the correlations stored in the ROM 120d-2. With this, the DRC circuit 124 enters a state where a zoom ratio and a zoom center position given by manipulation of the user are selected.

Please replace paragraphs 2 and 3 at page 31, with the following rewritten paragraphs:

In the ~~child-screen~~ OSD circuit 128 (as the functional block 8), the functional section 120e has a function to generate an image signal for a child screen based on an image signal, which is input by the second input terminal of the input connector 120b and received from the input selector 122, a function to generate a display signal that displays characters, figures, etc. on the screen, a function to select either an image signal received from the input selector 122 or an image signal, which is input by the first input terminal of the input connector 120b and received from the signal router 123, combine this selected image signal with the above-described child-screen image signal or display signal to acquire an output image signal, and output this output image signal to the output connector 120c, and the like.

As shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of this ~~child-screen~~ OSD circuit 128 stores the above-described common commands ch(1)-ch(12) meaning channel numbers 1-12, respectively, and intra-functional-block commands writeInputUVch(1-12) meaning channel display for channel numbers 1-12 in a condition where they are correlated with each other.

Please replace paragraphs 1, 2, 3 and 4 at page 32 continuing onto page 33, with the following rewritten paragraphs:

When the control port 120d-1 receives these common commands ch(1)-ch(12), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts these common command ch(1)-ch(12) into intra-functional-block command writeInputUVch(1-12) respectively based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display channels of channel numbers 1-12 and outputting an output image signal combined with this display signal.

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 stores the above-described common commands in(1)-in(3) meaning the above-mentioned inputs 1-3 and intra-functional-block commands writeInput(1-3) meaning input display of the inputs 1-3 in a condition where they are correlated with each other.

When the control port 120d-1 receives these common commands in(1)-in(3), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts these common commands in(1)-in(3) into intra-functional-block command writeInput(1-3), respectively, based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display the inputs 1-3 and outputting an output image signal combined with this display signal.

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 stores the above-described common commands InitializeConnect(1/2/3/4/5) meaning inter-functional-block connections 1-5, respectively, and intra-functional-block commands, writeRoute(1/2/3/4/5), meaning display of connection status, respectively, in a condition where they are correlated with each other. These intra-functional-block commands,

writeRoute(1/2/3/4/5), are respectively used to control the functional section 120e so that it may enter a state for displaying that the image-signal-processing apparatus 100 is any of the above-described first through fifth configurations.

Please replace paragraphs 1 and 2 at page 33, with the following rewritten paragraphs:

When the control port 120d-1 receives the common commands InitializeConnect(1/2/3/4/5), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts these common commands InitializeConnect(1/2/3/4/5) into intra-functional-block commands, writeRoute(1/2/3/4/5), respectively, based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the apparatus 100 is any of the first through fifth configurations respectively and outputting an output image signal combined with this display signal.

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 stores common commands DRCvolExec(on/off) meaning switchover of the DRC volume processing and intra-functional-block commands, writeProcessVol(on/off), meaning DRC volume processing display, intra-functional-block commands, displayInput(in1/in2), meaning switchover of a child-screen input source, and intra-functional-block commands, displaySize(in1,size1)/displaySize(in2,size1), meaning image sizes in a condition where they are correlated with each other.

Please replace paragraphs 2, 3 and 4 at page 35 continuing onto page 36, with the following rewritten paragraphs:

In this case, when the control port 120d-1 receives the common command DRCvolExec(on/off), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts this common command DRCvolExec(on/off) into intra-functional-block commands, writeProcessVol(on/off), displayInput(in1/in2), and displaySize(in1,size1)/displaySize(in2,size1) based on the correlations stored in the ROM 120d-2.

With this, the ~~child-screen~~ OSD circuit 128 enters a state for displaying the on-state or the off-state of the DRC volume processing, outputting an image signal either having or not having undergone the DRC volume processing, and directly outputting an image signal as an input source without performing contraction processing on it.

It is to be noted that upon power application, the common command DRCvolExec(on) is delivered as an initial value from the system control block 110 to the control bus 111. With this, upon power application, the ~~child-screen~~ OSD circuit 128 enters a state for displaying the on-state of the DRC volume processing, outputting an image signal that has undergone the DRC volume processing, and outputting the image signal directly as an input source without performing the contraction processing on it.

Please replace paragraphs 1, 2 and 3 at page 36 continuing onto page 37, with the following rewritten paragraphs:

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of this ~~child-screen~~ OSD circuit 128 stores the above-described common command DRCvol(resolusionVal,noiseVal)

meaning adjustment of the DRC resolution axis and the noise axis and intra-functional-block command, writeProcessDRCvol(resolutionVal,noiseVal), meaning display of DRC volume values in a condition where they are correlated with each other.

When the control port 120d-1 receives the common commands DRCvol(resolusionVal,noiseVal), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts this common command DRCvol(resolusionVal,noiseVal) into intra-functional-block command, writePorcessDRCvol(resolutionVal,noiseVal). With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display of volume value, "resolutionVal" on the resolution axis and volume value, "NoiseVal" on the noise axis and outputting an output image signal combined with this display signal.

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of this ~~child-screen~~ OSD circuit 128 stores the above-described common command DRCzoomExec(on/off) meaning switchover of the DRC zoom processing and intra-functional-block command, writeProcessZoom(on/off) meaning display of the DRC zoom processing, intra-functional-block command, displayInput(in1,in2/in1 or in2) meaning switchover of a child-screen input source, intra-functional-block commands, displaySize(in1,size1),displaySize(in2,size0.25)/displaySize(in1 or in2,size1) meaning an image size, intra-functional-block command, writeZoomFrame(InitRatio,InitHol,InitVer/off) meaning display of a zoom frame on a child screen, and intra-functional-block command, writeProcessDRCzoom(InitRatio,InitHol,InitVer/off) meaning display of a zoom center position in a condition where they are correlated with each other.

Please replace paragraphs 1, 2 and 3 at page 40, with the following rewritten paragraphs:

When the control port 120d-1 receives DRCzoomExec(on/off), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts this common command DRCzoomExec(on/off) into intra-functional-block commands, displayInput(in1,in2/in1 or in2), displaySize(in1,size1), displaySize(in2,size0.25)/displaySize(in1 or in2,size1), writeZoomFrame(InitRatio,InitHol,InitVer/off) and writeProcessDRCzoom(InitRatio,InitHo,InitVer/off) based on the correlations stored in the ROM 120d-2.

With this, the ~~child-screen~~ OSD circuit 128 enters a state for displaying the on-state or off-state of the DRC zoom processing, outputting an image signal which has undergone or has not undergone the DRC zoom processing, and, if the DRC zoom processing is to be performed, displaying a child screen which displays an entirety, and displaying a square frame which indicates a zoom processing portion on this child screen as well as a zoom ratio and a zoom center position.

Further, as shown in FIG. 5, the ROM 120d-2 in the control I/F 120d of this ~~child-screen~~ OSD circuit 128 stores the above-described common commands ~~DRCzoom(ratioVal, holizontalVal,verticalVal)~~ DRCzoom(ratioVal, horizontalVal,verticalVal) meaning adjustment of DRC zoom ratios and zoom center positions and intra-functional-block commands, ~~writeZoomFrame(ratioVal,holizontalVal,verticalVal)~~ writeZoomFrame(ratioVal,horizontalVal,verticalVal) meaning display of a zoom frame on a child screen and intra-functional-block commands, ~~writeProcessDRCzoom(ratioVal,holizontalVal,verticalVal)~~

writeProcessDRCzoom(ratioVal,horizontalVal,verticalVal) meaning display of DRC zoom ratios and zoom center positions in a condition where they are correlated with each other.

Please replace paragraphs 1, 2 and 3 at page 41, with the following rewritten paragraph:

The command, ~~writeZoomFrame(ratioVal,holizontalVal,verticalVal)~~ writeZoomFrame(ratioVal,horizontalVal,verticalVal) is used to control the functional section 120e to generate a display signal that displays on a child screen a square frame that corresponds to a portion that has undergone zoom processing by the DRC circuit 124 based on zoom ratio "ratioVal" and zoom center positions "~~holizontalVal~~ horizontalVal" and "verticalVal" and to combine this display signal into an output image signal.

The command, ~~writeProcessDRCzoom(ratioVal,holizontalVal,verticalVal)~~ writeProcessDRCzoom(ratioVal,horizontalVal,verticalVal) is used to control the functional section 120e to generate a display signal that indicates zoom ratio "ratioVal" and zoom center positions "~~holizontalVal~~ horizontalVal" and "verticalVal" and to combine this display signal into an output image signal.

When the control port 120d-1 receives the common commands, ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), the interpreter 120d-3 in the control I/F 120d of the ~~child screen~~ OSD circuit 128 converts the common command ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) into intra-functional-block commands, ~~writeZoomFrame(ratioVal,holizontalVal,verticalVal)~~ writeZoomFrame(ratioVal,horizontalVal,verticalVal) and

~~writeProcessDRCzoom(ratioVal,holizontalVal,verticalVal)~~

writeProcessDRCzoom(ratioVal,horizontalVal,verticalVal) based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that indicates a zoom ratio and zoom center positions, generating as well a display signal that displays on a child screen a square frame that corresponds to a portion which has already undergone zoom processing, and outputting an output image signal combined with these display signals.

Please replace paragraph 4 at page 42, with the following rewritten paragraph:

Next, at step ST3, the system control block 110 delivers to the control bus 111 any one of the common commands InitializeConnect(1/2/3/4/5) meaning inter-functional-block connections 1-5 based on the above-described configuration recognized at the step ST2. The common commands relate to the signal router 123 (as the functional block 3) and the ~~child-screen~~ OSD circuit 128 (as the functional block 8) (see FIG. 5).

Please replace paragraph 1 at page 44, with the following rewritten paragraph:

Further, when the control port 120d-1 receives this common command, the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts the common commands into intra-functional-block commands meaning connection status display based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to provide a display such that the apparatus 100 has a configuration recognized by the system control block 110 at the step ST2 and outputting an output image signal combined with this display signal.

Please replace paragraphs 1, 2 and 3 at page 45 continuing onto page 46, with the following rewritten paragraphs:

The common commands DRCzoomExec(on/off) respectively mean switchover of DRC zoom processing and are common commands of the fifth kind. The common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) respectively mean DRC zoom ratio and zoom center positions and are common commands of the sixth kind. The common commands InitializeConnect(1/2/3/4/5) respectively mean inter-functional-block connection and are common commands of the seventh kind.

In this case, as for the common commands of the first kind, the system control block 110 delivers the common commands stored in the channel number-dedicated last memory region to the control bus 111 as initial values thereof. With this, the U/V tuner 121 enters a state in which it has selected a channel selected at the time of power-off. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display that selected channel and outputting an output image signal combined with this display signal.

As for the common commands of the second kind, the system control block 110 delivers the common commands stored in the input selection-dedicated last memory region to the control bus 111 as initial values thereof. With this, the input selector 122 enters a state in which it selects an input selected at the time of power-off. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display the selected input and outputting an output image signal combined with this display signal.

Please replace paragraphs 1 and 2 at page 46, with the following rewritten paragraphs:

As for the common commands of the third kind, the system control block 110 delivers the common command DRCvolExec(on) to the control bus 111 as an initial value thereof. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to provide a display such that the DRC volume processing is in the on-state and outputting an output image signal combined with this display signal. Further, the ~~child-screen~~ OSD circuit 128 enters a state for selecting as an input source an image signal that has undergone the DRC volume processing and is output from the signal router 123 and outputting this image signal directly without performing contraction processing on it.

As for the common commands of the fourth kind, the system control block 110 delivers the common commands stored in the volume value-dedicated last memory region to the control bus 111 as initial values thereof. With this, the DRC circuit 124 enters a state for performing the DRC volume processing by use of a volume value on the resolution axis and a volume value on the noise axis at the time of power-off. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display those volume values on the resolution and noise axes respectively. Further, the noise removal circuit 127 enters a state for performing noise suppression at a suppression ratio that corresponds to that volume value on the noise axis.

Please replace paragraphs 1, 2 and 3 at page 47, with the following rewritten paragraphs:

As for the common commands of the fifth kind, the system control block 110 delivers the common command DRCzoomExec(off) to the control bus 111 as an initial value thereof. With

this, the DRC circuit 124 enters a state for stopping performing the DRC zoom processing. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to provide a display such that the DRC zoom processing is in the off-state and outputting an output image signal combined with this display signal. Further, the ~~child-screen~~ OSD circuit 128 enters a state for selecting as an input source an image signal output from the signal router 123 and outputting this image signal as it is without performing contraction processing on it if the DRC volume processing is in the on-state or selecting as an input source an image signal output from the input selector 122 and outputting this image signal as it is without performing contraction processing on it if the DRC volume processing is in the off-state.

Further, the child-screen OSD circuit 128 stops generating a display signal that displays on a ~~child-screen~~ a square frame that corresponds to a portion that has undergone DRC zoom processing and combining it into an output image signal or generating a display signal that indicates a zoom ratio and zoom center positions and combining it into an output image signal.

As for the common commands of the sixth kind, the system control block 110 delivers the common commands DRCzoom(InitRatio, InitHol,InitVer) to the control bus 111 as initial values thereof. With this, the DRC circuit 124 enters an on-state for performing the DRC zoom processing that corresponds to the zoom ratio initial value "InitRatio" and the zoom center position initial values "InitHol" and "InitVer". Further, when the DRC zoom processing is turned on, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the zoom ratio initial value "InitRatio" and the zoom center position initial values "InitHol" and "InitVer", generating a display signal that displays on a child screen a square frame corresponding to a portion that has undergone the DRC zoom processing, and outputting an output image signal combined with this display signal.

Please replace paragraphs 2 and 3 at page 48 continuing onto page 49, with the following rewritten paragraphs:

In this case, if the user has operated to select channel numbers 1-12, the system control block 110 delivers common commands ch(1)-ch(12) to the control bus 111, respectively. With this, the U/V tuner 121 enters a state where it has selected a channel intended. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the selected channel and outputting an output image signal combined with this display signal. It is to be noted that the system control block 110 updates common commands stored in the channel number-dedicated last memory region with this delivered common command.

Further, if the user operates to select the inputs 1-3, the system control block 110 delivers the common commands in(1)-in(3) to the control bus 111, respectively. With this, the input selector 122 enters a state where it is switched to a selected input. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the switched input and outputting an output image signal combined with this display signal. It is to be noted that the system control block 110 updates any common commands stored in the input selector-dedicated last memory region with these delivered common commands.

Please replace paragraphs 2 and 3 at page 49 continuing onto page 50, with the following rewritten paragraphs:

Further, if the user operates to switch the DRC volume processing from the off-state to the on-state, the system control block 110 delivers the common command DRCvolExec(on) to the control bus 111. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the on-state of the DRC volume processing and outputting an output

image signal combined with this display signal. Further, this ~~child-screen~~ OSD circuit 128 enters a state for providing as an input source an image signal from the signal router 123 that has undergone the DRC volume processing and outputting this image signal directly as an output image signal without performing the contraction processing on it.

Further, if the user operates to switch the DRC volume processing from the on-state to the off-state, the system control block 110 delivers the common command DRCvolExec(off) to the control bus 111. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the off-state of the DRC volume processing and outputting an output image signal combined with this display signal. Further, this ~~child-screen~~ OSD circuit 128 enters a state for providing as an input source an image signal from the signal selector 122 that is not undergone the DRC volume processing and outputting this image signal directly as an output image signal without performing the contraction processing on it.

Please replace paragraphs 1 and 2 at page 50 continuing page 51, with the following rewritten paragraphs:

Further, if the user operates to change volume values on the resolution axis and the noise axis, the system control block 110 delivers the common command DRCvol(resolutionVal,noiseVal) to the control bus 111. With this, the DRC circuit 124 enters a state in which a resolution and a noise removal ratio corresponding to the volume values on the resolution axis and noise axis by use of the user operation are selected. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays the volume value "resolutionVal" on the resolution axis and the volume value "noiseVal" on the noise axis and outputting an output image signal combined with this display signal. Furthermore, the noise

removal circuit 127 enters a state for suppressing noise at a suppression ratio that corresponds to the volume value "noiseVal" on the noise axis. It is to be noted that the system control block 110 updates any common commands stored in the volume value-dedicated last memory region with this delivered common command.

Further, if the user operates to switch the DRC zoom processing from the off-state to the on-state, the system control block 110 delivers the common command DRCzoomExec(on) to the control bus 111. With this, the DRC circuit 124 enters a state for performing DRC zoom processing that corresponds to initial values of the zoom ratio and the zoom center positions. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the DRC zoom processing is in the on-state and outputting an output image signal combined with this display signal. Further, the ~~child-screen~~ OSD circuit 128 enters a state for outputting an output image signal obtained by combining an image signal which has already undergone DRC zoom processing (by use of initial values of the zoom ratio and the zoom center positions) and is received from the signal router 123 with a child-screen image signal obtained by performing 0.25-fold contraction processing on an image signal received from the input selector 122. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that displays on a child screen a square frame that corresponds to a portion that has undergone zoom processing by the DRC circuit 124 and outputting an output image signal combined with this display signal. Furthermore, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that indicates initial values of the zoom ratio and the zoom center positions and outputting an output image signal combined with this display signal.

Please replace paragraph 1 at page 51 continuing onto page 52, with the following rewritten paragraph:

Further, if the user operates to switch the DRC zoom processing from the on-state to the off-state, the system control block 110 delivers the common command DRCzoomExec(off) to the control bus 111. With this, the DRC circuit 124 enters a state for performing the DRC zoom processing using a zoom ratio of 1 and a zoom center position of (0, 0), therefore, stopping performing the DRC zoom processing substantially. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the DRC zoom processing is in the off-state and outputting an output image signal combined with this display signal. Further, this ~~child-screen~~ OSD circuit 128 enters a state for outputting an image signal from the signal router 123 directly as an output image signal without performing contraction processing on it if the DRC volume processing is on the on-state or the circuit 128 enters a state for outputting an image signal from the input selector 122 directly as an output image signal without performing contraction processing on it if the DRC volume processing is in the off-state.

Please replace paragraph 1 at page 52, with the following rewritten paragraph:

Further, if the user operates to change a zoom ratio and zoom center positions, the system control block 110 delivers the common command ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) to the control bus 111. With this, the DRC circuit 124 enters a state for performing the DRC zoom processing that corresponds to the changed zoom ratio and the changed zoom center position. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that indicates a zoom ratio and a zoom center position, generating a display signal that displays on a child screen a square frame corresponding

to a portion that has undergone zoom processing, and outputting an output image signal combined with these display signals.

Please replace paragraph 4 at page 53 continuing onto page 54, with the following rewritten paragraph:

For example, FIG. 7 shows the DRC circuit 124 (as the functional block 4) and the ~~child-screen~~ OSD circuit 128 (as the functional block 8). The functional section 120e in the DRC circuit 124 has in it a DRC section for performing the DRC zoom processing. The functional section 120e in the ~~child-screen~~ OSD circuit 128 has in it a child-screen section for obtaining an image signal to be displayed on a child screen and an on-screen display (OSD) section for generating a display signal that displays a square frame corresponding to a portion that has undergone zoom processing.

Please replace paragraphs 1, 2 and 3 at page 54 continuing onto page 55, with the following rewritten paragraph:

Consider a case where the DRC zoom processing is in the on-state and the common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) are delivered from the system control block 110 to the control bus 111 when a user operates to change a zoom ratio and a zoom position.

In this case, the functional section 120e in the DRC circuit 124 is supplied with the intra-functional-block commands, ~~zoom(ratioVal,holizontalVal,verticalVal)~~ zoom(ratioVal,horizontalVal,verticalVal). The DRC section, on the other hand, performs the DRC zoom processing that corresponds to the zoom ratio "ratioVal" and the zoom center

positions "~~holizontalVal~~ horizontalVal" and "verticalVal". Further, in this case, the functional section 120e in the ~~child-screen~~ OSD circuit 128 is supplied with intra-functional-block command, ~~writeZoomFrame(ratioVal,holizontalVal,verticalVal)~~ writeZoomFrame(ratioVal,horizontalVal,verticalVal). The OSD section, on the other hand, generates a display signal that displays on a child screen a square frame corresponding to a portion that has undergone zoom processing.

Further, in this case, the functional section 120e in the ~~child-screen~~ OSD circuit 128 combines an image signal from the signal router 123 that has undergone the DRC zoom processing with a child-screen image signal obtained by performing contraction processing on an image signal from the input selector 122 on the child screen section to thereby obtain an output image signal and also combines this output image signal with a display signal that displays on the child screen a square frame corresponding to a zoomed portion that is generated by the OSD section.

Please replace paragraphs 1, 2 and 3 at page 55, with the following rewritten paragraphs:

With this, according to an output image signal output from the ~~child-screen~~ OSD circuit 128, for example, as shown in FIG. 8, an image IM2 due to a child-screen image signal is displayed as superimposed on an image IM1 due to an image signal obtained through the DRC zoom processing and, further, on this image IM2, a square frame FLM that corresponds to the zoomed portion is displayed.

As described above, the common command ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) is

delivered from the system control block 110 to the control bus 111 and if this common command is received by both the DRC circuit 124 and the ~~child-screen~~ OSD circuit 128, contents of an intra-frame portion of the image IM1 and those of the IM2 agree completely.

However, if this common command could be received only one of the DRC circuit 124 and the ~~child-screen~~ OSD circuit 128, contents of the intra-frame portion of the image IM1 and those of the image IM2 do not agree, thus resulting in misalignment in cooperation. In this case, by delivering this common command to the control bus 111 from the system control block 110 after a predetermined lapse of time, this common command can be received by one of the functional blocks that could not receive it so that contents of the intra-frame portions of the images IM1 and IM2 may agree with each other.

Please replace paragraph 4 at page 56 continuing onto page 57, with the following rewritten paragraph:

The following will describe the above-described first through fifth configurations of the image-signal-processing apparatus 100. A basic configuration of this image-signal-processing apparatus 100 refers to such a state that, for example, the U/V tuner ~~112~~ 121 is inserted into the slot 104a and the DRC circuit 124 is inserted into the slot 104c. This basic configuration is the first configuration.

Please replace paragraphs 1, 2 and 3 at page 57 continuing onto page 58, with the following rewritten paragraphs:

FIG. 9 shows a connection status of the basic configuration (the first configuration). In this case, upon power application, the system control block 110 acquires common commands

from the input selector 122, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121 and the DRC circuit 124 and also acquires substrate IDs from these input selector 122, signal router 123, ~~child-screen~~ OSD circuit 128, U/V tuner 121, and DRC circuit 124, thus recognizing that the apparatus 100 has the first configuration (the basic configuration).

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(1) meaning this first configuration. With this, the signal router 123 enters the first state in which the first input terminal is connected to the first output terminal and the second input terminal is connected to the fourth output terminal. This causes the DRC circuit 124 to be inserted into a processing system. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the apparatus 100 has the first configuration and outputting an output image signal combined with this display signal.

Further, the system control block 110 delivers to the control bus 111 initial values of of common commands of all kinds (see FIG. 5) except those common commands related to the signal router 123. With this, the input selector 122, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, and the DRC circuit 124 enter their initial states, thus starting operations as the image-signal-processing apparatus 100.

Please replace paragraphs 3 and 4 at page 58, with the following rewritten paragraphs:

The image signal selected by this input selector 122 is input via the first input terminal and the first output terminal of the signal router 123 to the DRC circuit 124. This DRC circuit 124 performs the DRC volume processing and the DRC zoom processing on the input image signal based on the common commands DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~

DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the the system control block 110.

Then, the image signal output from the DRC circuit 124 is supplied via the second input terminal and the fourth output terminal of the signal router 123 to the first input terminal of the ~~child-screen~~ OSD circuit 128. The second input terminal of this ~~child-screen~~ OSD circuit 128 is supplied with an image signal selected by the input selector 122.

Please replace paragraphs 1, 2 and 5 at page 59 continuing onto page 60, with the following rewritten paragraph:

The ~~child-screen~~ OSD circuit 128 performs processing to obtain an output image signal and processing to combine this output image signal with display signals that provides various displays based on the common commands ch(1)-ch(12), in(1)-in(2), DRCvolExec(on/off), DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110.

The output image signal obtained by this ~~child-screen~~ OSD circuit 128 is output as an output image signal to the connector 103 (see FIG. 1). This output image signal is supplied to a display constituted of, for example, a cathode ray tube (CRT).

FIG. 10 shows a connection status of the second configuration. In this case, upon power application, the system control block 110 acquires common commands from the input selector 122, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121 and the DRC circuit 124 and also acquires substrate IDs from the input selector 122, the signal router 123, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, and

the digital terrestrial tuner 126, thus recognizing that the apparatus 100 has the second configuration.

Please replace paragraphs 1 and 2 at page 60, with the following rewritten paragraphs:

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(2) meaning this second configuration. With this, the signal router 123 enters the first state in which the first input terminal is connected to the first output terminal and the second input terminal is connected to the fourth output terminal. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the apparatus 100 has the second configuration and outputting an output image signal combined with this display signal.

Further, the system control block 110 delivers to the control bus 111 initial values of common commands of all kinds except those common commands related to the signal router 123. With this, the input selector 122, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, and the DRC circuit 124 enter their initial states, thus starting operations as the image-signal-processing apparatus 100. In this case, the operations are the same as those with the above-described first configuration except that an image signal (input 2) obtained by the digital terrestrial tuner 126 can also be selected.

Please replace paragraphs 2 and 3 at page 61 continuing onto page 62, with the following rewritten paragraphs:

In this case, upon power application, the system control block 110 acquires common commands from the input selector 122, the signal router 123, and the ~~child-screen~~ OSD circuit

128 as well as the U/V tuner 121 and the DRC circuit 124 and also acquires substrate IDs from the input selector 122, the signal router 123, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, and the panel-dedicated processing circuit 125, thus recognizing that the apparatus 100 has the third configuration.

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(3) meaning this third configuration. With this, the signal router 123 enters the second state in which the first input terminal is connected to the first output terminal, the second input terminal is connected to the second output terminal, and the third input terminal is connected to the fourth output terminal. With this, the DRC circuit 124 and the panel-dedicated processing circuit 125 are inserted into a processing system. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the apparatus 100 has the third configuration and outputting an output image signal combined with this display signal.

Please replace paragraphs 1 and 4 at page 62, with the following rewritten paragraphs:

Further, the system control block 110 delivers to the control bus 111 initial values of the common commands of all kinds except those common commands related to the signal router 123. With this, the input selector 122, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, and the DRC circuit 124 enter their initial states, thus starting operations as the image-signal-processing apparatus 100.

The image signal selected by this input selector 122 is input to the DRC circuit 124 via the first input terminal and the first output terminal of the signal router 123. This DRC circuit

124 performs the DRC volume processing and the DRC zoom processing on the input image signal based on common commands DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110.

Please replace paragraphs 2 and 3 at page 63 continuing onto page 64, with the following rewritten paragraphs:

The image signal output from this panel-dedicated processing circuit 125 is supplied to the first input terminal of the ~~child-screen~~ OSD circuit 128 via the third input terminal and the fourth terminal of the signal router 123. The second input terminal of this ~~child-screen~~ OSD circuit 128 is supplied with an image signal selected by the input selector 122. This ~~child-screen~~ OSD circuit 128 performs processing to obtain an output image signal based on the common commands ch(1)-ch(12), in(1)-in(2), DRCvolExec(on/off), DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110 and processing to combine this output image signal with display signals to provide various displays, etc.

This output image signal obtained by this ~~child-screen~~ OSD circuit 128 is output as an output image signal to the connector 103 (see FIG. 1). This output image signal is supplied to a display constituted of an LCD if the panel-dedicated processing circuit 125 is provided for the LCD and, if it is provided for a PDP, supplied to a display constituted of the PDP.

Please replace paragraphs 3 and 4 at page 64 continuing onto page 65, with the following rewritten paragraphs:

In this case, upon power application, the system control block 110 acquires common commands from the input selector 122, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121, the DRC circuit 124 and the noise removal circuit 127, and also acquires substrate IDs from the input selector 122, the signal router 123, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, the panel-dedicated processing circuit 125, and the noise removal circuit 127, thus recognizing that the apparatus 100 has the fourth configuration.

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(4) meaning this fourth configuration. With this, the signal router 123 enters the third state in which the first input terminal is connected to the third output terminal, the fourth input terminal is connected to the first output terminal, the second input terminal is connected to the second output terminal, and the third input terminal is connected to the fourth output terminal. Further, the DRC circuit 124, the panel-dedicated processing circuit 125, and the noise removal circuit 127 are inserted into a processing system. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provides a display such that the apparatus 100 has the fourth configuration and outputting an output image signal combined with this display signal.

Please replace paragraph 1 at page 65, with the following rewritten paragraph:

Further, the system control block 110 delivers to the control bus 111 initial values of common commands of all kinds except those common commands related to the signal router

123. With this, the input selector 122, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, and the noise removal circuit 127 enter their initial states, thus starting operations as the image-signal-processing apparatus 100.

Please replace paragraphs 2 and 4 at page 66 continuing onto page 67, with the following rewritten paragraphs:

The image signal output from this noise removal circuit 127 is supplied to the DRC circuit 124 via the fourth input terminal and the first output terminal of the signal router 123. This DRC circuit 124 performs on the input image signal DRC volume processing and DRC zoom processing based on the common commands DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal).

Then, the image signal output from this panel-dedicated processing circuit 125 is supplied to the first input terminal of the ~~child-screen~~ OSD circuit 128 via the third input terminal and the fourth output terminal of the signal router 123. The second input terminal of this ~~child-screen~~ OSD circuit 128 is supplied with an image signal selected by the input selector 122. This ~~child-screen~~ OSD circuit 128 performs any processing to obtain an output image signal, combine this output image signal with display signals to provide various displays, etc. based on the common commands ch(1)-ch(12), in(1)-in(2), DRCvolExec(on/off), DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal).

Please replace paragraphs 1 and 4 at page 67 continuing onto page 68, with the following rewritten paragraphs:

The output image signal obtained by this ~~child-screen~~ OSD circuit 128 is output as an output image signal to the connector 103 (see FIG. 1). This output image signal is supplied to a display constituted of an LCD if the panel-dedicated processing circuit 125 is provided for the LCD and, if it is provided for a PDP, supplied to a display constituted of the PDP.

In this case, upon power application, the system control block 110 acquires common commands from the input selector 122, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121, the DRC circuit 124, and the noise removal circuit 127 and also acquires the substrate IDs from the input selector 122, the signal router 123, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, the panel-dedicated processing circuit 125, the noise removal circuit 127, and the digital terrestrial tuner 126, thus recognizing that the apparatus 100 has the fifth configuration.

Please replace paragraphs 1 and 2 at page 68 continuing onto page 69, with the following rewritten paragraphs:

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(5) meaning this fifth configuration. With this, the signal router 123 enters the third state in which the first input terminal is connected to the third output terminal, the fourth input terminal is connected to the first output terminal, the second input terminal is connected to the second output terminal, and the third input terminal is connected to the fourth output terminal. Further, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal

that provides a display such that the apparatus 100 has the fifth configuration and outputting an output image signal combined with this display signal.

Further, the system control block 110 delivers to the control bus 111 initial values of the common commands of all kinds except those common commands related to the signal router 123. With this, the input selector 122, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, and the noise removal circuit 127 enter their initial states, thus starting operations as the image-signal-processing apparatus 100. The operations in this case are the same as those with the above-described fourth configuration except that an image signal (input 2) obtained by the digital terrestrial tuner 126 can also be selected by the input selector 122.

Please replace paragraphs 2 and 3 at page 69 continuing onto page 70, with the following rewritten paragraphs:

In the above-described first embodiment, if a common command sent from the system control block 110 relates to the functional blocks 120 (the U/V tuner 121, the input selector 122, the signal router 123, the DRC circuit 124, the noise removal circuit 127, and the ~~child-screen~~ OSD circuit 128) themselves, each of them converts it into an intra-functional-block command that controls their functional section 120e. Therefore, in the first embodiment, each functional block 120 operates adaptively in accordance with any common commands sent from the system control block 110, so that it is possible to easily upgrade functions of the functional block 120 by upgrading a version thereof without changing the common commands from the system control block 110.

That is, FIG. 14A shows a configuration of the DRC circuit 124 before its version has been upgraded. The functional section 120e in this DRC circuit 124 has in it a single DRC

section for performing the DRC zoom processing and the DRC zoom processing for the resolution axis and the noise axis. As shown in the above-described FIG. 5, the ROM 120d-2 (not shown in FIG. 14A) in the control I/F 120d of this DRC circuit 124 stores DRCvol(resolutionVal,noiseVal) meaning adjustment of the DRC resolution axis and the noise axis with it being correlated with the intra-functional-block command, volume(resolutionVal,noiseVal) meaning substitution of DRC (resolution axis and noise axis) volume values; the common commands DRCzoomExec(on/off) meaning switchover of the DRC zoom processing with them being correlated with the intra-functional-block command zoom(InitRatio/1,InitHol/0,InitVer/0) meaning substitution of DRC zoom initial values; and the common commands ~~DRCzoom(ratioVal, holizontalVal,verticalVal)~~ DRCzoom(ratioVal, horizontalVal,verticalVal) meaning adjustment of DRC zoom ratio and zoom center positions with them being correlated with the intra-functional-block commands, ~~zoom(ratioVal,holizontalVal,verticalVal)~~ zoom(ratioVal,horizontalVal,verticalVal) meaning substitution of the DRC zoom ratio and the zoom center positions.

Please replace paragraph 2 at page 70 continuing onto page 71, with the following rewritten paragraphs:

As shown in the above-described FIG. 15, the ROM 120d-2 (not shown in FIG. 14B) in the control I/F 120d for these DRC sections stores DRCvol(resolutionVal,noiseVal) meaning adjustment of the DRC resolution axis and the noise axis with it being correlated with intra-functional-block command, volumeResolution(resolutionVal) meaning substitution of DRC (resolution axis) volume values and intra-functional-block command, volumeNoise(noiseVal) meaning substitution of DRC (noise axis) volume values. Further, this ROM 120d-2 stores

common command DRCzoomExec(on/off) meaning switchover of the DRC zoom processing with it being correlated with intra-functional-block command, zoom(InitRatio/1,InitHol/0,InitVer/0) meaning substitution of DRC zoom initial values; and the common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) meaning adjustment of DRC zoom ratio and zoom center positions with them being correlated with intra-functional-block command, ~~zoom(ratioVal,holizontalVal,verticalVal)~~ zoom(ratioVal,horizontalVal,verticalVal) meaning substitution of DRC zoom ratio and zoom center positions.

Please replace paragraph 4 at page 76 continuing onto page 77, with the following rewritten paragraph:

Further, the DRC circuit 124 (as a functional block 4) in the image-signal-processing apparatus 100A stores, in the ROM 120d-2 in its control I/F 120d, the common commands DRCvol(resolutionVal,noiseVal) meaning adjustment of the DRC resolution axis and the noise axis with them being correlated with the intra-functional-block commands, volume(resolutionVal,noiseVal) meaning substitution of DRC (resolution axis and noise axis) volume values; the common commands DRCzoomExec(on/off) meaning switchover of DRC zoom processing with them being correlated with the intra-functional-block commands, zoom(InitRatio/1,InitHol/0,InitVer/0) meaning substitution of DRC zoom initial values; and the common commands ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) meaning adjustment of DRC zoom ratio and zoom center positions with them being correlated with the intra-functional-block commands, ~~zoom(ratioVal,holizontalVal,verticalVal)~~ zoom(ratioVal,horizontalVal,verticalVal) meaning

substitution of DRC zoom ratio and zoom center positions, as shown in FIG. 5, as well as it stores the common commands InputNoise(0-9) meaning the input noise levels with them being correlated with the intra-functional-block commands, volumeNoise(noiseVal) meaning substitution of DRC (noise axis) volume values as shown in FIG. 20.

Please replace paragraph 3 at page 78 continuing onto page 79, with the following rewritten paragraph:

Further, the ~~child-screen~~ OSD circuit 128 (as a functional block 8) in the image-signal-processing apparatus 100A stores, in the ROM 120d-2 in its control I/F 120d, the correlations between the common commands and the intra-functional-block commands shown in FIG. 5 as well as it stores the common commands InputNoise(0-9) and the intra-functional-block commands, writeInputNoise(0-9) meaning the input noise level display, respectively, in a condition where they are correlated with each other.

Please replace paragraph 1 at page 79, with the following rewritten paragraph:

When the control port 120d-1 receives the common command InputNoise(0-9), the interpreter 120d-3 in the control I/F 120d of the ~~child-screen~~ OSD circuit 128 converts the common commands InputNoise(0-9) into the intra-functional-block commands, InputNoise(0-9) based on the correlations stored in the ROM 120d-2. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal to display the noise levels 0-9 and outputting an output image signal combined with this display signal.

Please replace paragraphs 1 and 2 at page 80, with the following rewritten paragraphs:

FIG. 23 shows a connection status of the basic configuration (as the first configuration). In this case, upon power application, the system control block 110 acquires common commands from the input selector 122A, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121 and the DRC circuit 124 and also acquires substrate IDs from these input selector 122A, signal router 123, ~~child-screen~~ OSD circuit 128, U/V tuner 121, and DRC circuit 124, thus recognizing that the apparatus 100A has the first configuration (the basic configuration).

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(1) meaning this first configuration. With this, the signal router 123 enters the first state in which the first input terminal is connected to the first output terminal and the second input terminal is connected to the fourth output terminal. Further, the ~~child-screen~~ OSD circuit 128 generates a display signal to provide a display such that the apparatus 100A has the first configuration (the basic configuration) and outputting an output image signal combined with this display signal.

Please replace paragraphs 2 and 5 at page 81 continuing onto page 82, with the following rewritten paragraphs:

With this, the input selector 122A, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, and the DRC circuit 124 enter their initial states, thus starting operations as the image-signal-processing apparatus 100A. In this case, it is to be noted that as for the volume values noiseVal

on the noise axis of the DRC circuit 124, such a value as to correspond to, for example, the common command InputNoise(x') is prioritized.

The image signal selected by this input selector 122A is input via the first input terminal and the first output terminal of the signal router 123 to the DRC circuit 124. This DRC circuit 124 performs the DRC volume processing and the DRC zoom processing on the input image signal based on the common commands DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110, and the common command InputNoise(x'), which is sent from the input selector 122A.

Please replace paragraphs 1, 2 and 3 at page 82 continuing onto page 83s, with the following rewritten paragraphs:

Then, an image signal output from the DRC circuit 124 is supplied via the second input terminal and the fourth output terminal of the signal router 123 to the first input terminal of the ~~child-screen~~ OSD circuit 128. The second input terminal of this ~~child-screen~~ OSD circuit 128 is supplied with an image signal selected by the input selector 122A.

The ~~child-screen~~ OSD circuit 128 performs any processing to obtain an output image signal and any processing to combine this output image signal with display signals that provide various displays based the common commands ch(1)-ch(12), in(1)-in(2), DRCvolExec(on/off), DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110 and the common command InputNoise(x'), which is sent from the input selector 122A.

The output image signal obtained by this ~~child-screen~~ OSD circuit 128 is output as an output image signal to the connector 103 (see FIG. 16). This output image signal is supplied to a display constituted of, for example, a cathode ray tube (CRT).

Please replace paragraphs 1, 2 and 3 at page 83, with the following rewritten paragraphs:

Further, after power application, if noise level x detected by the noise detection section 120f in the input selector 122A has changed from the noise level x' that has already detected, the common command InputNoise(x) is issued from the input selector 122A and delivered to the control bus 111. With this, a volume value noiseVal on the noise axis in the DRC circuit 124 is changed to a value corresponding to the noise level x and a display value of an input noise level due to the ~~child-screen~~ OSD circuit 128 is also changed.

FIGS. 24 and 25 each show a connection status of the fourth configuration. In this case, upon power application, the system control block 110 acquires common commands from the input selector 122A, the signal router 123, and the ~~child-screen~~ OSD circuit 128 as well as the U/V tuner 121, the DRC circuit 124, and the noise removal circuit 127 and also acquires substrate IDs from the input selector 122A, the signal router 123, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, the panel-dedicated processing circuit 125, and the noise removal circuit 127, thus recognizing that the apparatus 100A has the fourth configuration.

Then, the system control block 110 delivers to the control bus 111 the common command InitializeConnect(4) meaning this fourth configuration. With this, the ~~child-screen~~ OSD circuit 128 enters a state for generating a display signal that provide a display such that the apparatus

100A has the fourth configuration and outputting an output image signal combined with this display signal.

Please replace paragraph 1 at page 85, with the following rewritten paragraph:

Further, the system control block 110 delivers to the control bus 111 initial values (see FIG. 5) of common commands of all kinds except those common commands related to the signal router 123. Further, the input selector 122A delivers the common command InputNoise(x') to the control bus 111 upon power application as described above. With this, the input selector 122A, the ~~child-screen~~ OSD circuit 128, the U/V tuner 121, the DRC circuit 124, and the panel-dedicated processing circuit 125 enter their initial states, thus starting operations as the image-signal-processing apparatus 100A. In this case, it is to be noted that as for the volume values noiseVal on the noise axis of the DRC circuit 124, such a value as to correspond to, for example, the common command InputNoise(x') is prioritized.

Please replace paragraphs 2 and 4 at page 86 continuing onto page 87, with the following rewritten paragraphs:

This DRC circuit 124 performs the DRC volume processing and the DRC zoom processing on the input image signal based on the common commands DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110 and the common command InputNoise(x'), which is sent from the input selector 122A.

Then, the image signal output from this panel-dedicated processing circuit 125 is supplied to the first input terminal of the ~~child-screen~~ OSD circuit 128 via the third input terminal and the fourth terminal of the signal router 123. The second input terminal of this ~~child-screen~~ OSD circuit 128 is supplied with an image signal selected by the input selector 122A. This ~~child-screen~~ OSD circuit 128 performs any processing to obtain an output image signal, combine this output image signal with display signals to provide various displays, etc. based on the common commands ch(1)-ch(12), in(1)-in(2), DRCvolExec(on/off), DRCvol(resolutionVal,noiseVal), DRCzoomExec(on/off), and ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal), which are sent from the system control block 110, and the common command InputNoise(x'), which is sent from the input selector 122A.

Please replace paragraphs 1 and 3 at page 87 continuing onto page 88, with the following rewritten paragraph:

This output image signal obtained by this ~~child-screen~~ OSD circuit 128 is output as an output image signal to the connector 103 (see FIG. 16). This output image signal is supplied to a display constituted of an LCD if the panel-dedicated processing circuit 125 is provided for the LCD and, if it is provided for a PDP, supplied to a display constituted of the PDP.

Further, after power application, if noise level x detected by the noise detection section 120f in the input selector 122A has changed from the noise level x' that has been already detected, the common command InputNoise(x') is issued from the input selector 122A and delivered to the control bus 111. With this, a volume value noiseVal on the noise axis in the DRC circuit 124 is changed to a value corresponding to the noise level x and a display value of

an input noise level due to the ~~child screen~~ OSD circuit 128 is also changed. Further, a noise suppression value at the noise removal circuit 127 is changed to a value corresponding to the noise level x and the signal router 123 enters the third state (see FIG. 24) or the fourth state (see FIG. 25) in accordance with whether the noise level x is larger than the predetermined level c.

Please replace paragraph 1 at page 88, with the following rewritten paragraph:

According to this second embodiment, if a common command transmitted from the system control block 110 and the input selector 122A relates to each of the control blocks 120 (the U/V tuner 121, the input selector 122A, the signal router 123, the DRC circuit 124, the noise removal circuit 127, and the ~~child screen~~ OSD circuit 128), the control blocks 120 convert this common command into an intra-functional-block command to control the functional section 120e thereof. In this second embodiment, as in the case of the above-described first embodiment, each of the functional blocks 120 adaptively operates, thereby enabling easily upgrading functions of the control block 120 by version upgrade thereof without changing the common commands.

Please replace paragraph 3 at page 91 continuing onto page 92, with the following rewritten paragraph:

FIGS. 29 and 30 show correlations between common commands and intra-functional-block commands. FIG. 29 shows the correlations in a case where a DRC circuit (as a functional block 4) shown in FIG. 26 has no zoom functions and FIG. 30 shows the correlations in a case where the DRC circuit 124 has zoom functions. To upgrade the DRC circuit 124 so that it may have zoom functions, common commands DRCzoomExec(on/off) and

~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) are newly added. Contents of the common commands shown in FIGS. 29 and 30 are the same as those shown in the above-described FIG. 5, the description of which will be omitted here.

Please replace paragraph 1 at page 92, with the following rewritten paragraph:

For example, it is supposed that identifiers of the common commands ch(1)-ch(12) are "0xC01-0xC0C; identifiers of the common commands in(1)-in(3) are "0xA01"; an identifier of DRCvolExec(on/off) is "0x501"; an identifier of DRCvol(resolutionVal,noiseVal) is "0x502"; an identifier of DRCzoomExec(on/off) is "0x503"; an identifier of ~~DRCzoom(ratioVal,holizontalVal,verticalVal)~~ DRCzoom(ratioVal,horizontalVal,verticalVal) is "0x504", and an identifier of the common command InitializeConnect(1/2/3/4/5) is "0x001". The common commands ch(1)-ch(12) are comprised of only identifiers "0xC01-0xC0C" so that their contents can be known from these and so require no payload portions, whereas contents of the other common commands cannot be known only from their identifiers, so that their parameters are allocated to their payload portions.

Please replace paragraph 1 at page 93, with the following rewritten paragraph:

The memory card is inserted into the slot 105 when, for example, the DRC circuit 124 is upgraded so that it may have zoom functions. In this case, upgrade data related to the common commands DRCzoomExec(on/off) and ~~DRCzoom(ratioVal, holizontalVal,verticalVal)~~ DRCzoom(ratioVal, horizontalVal,verticalVal) is supplied with the memory card. In this case, the upgraded DRC circuit 124 itself has data indicative of correlations between the common commands DRCzoomExec(on/off) and ~~DRCzoom(ratioVal, holizontalVal,verticalVal)~~

DRCzoom(ratioVal, horizontalVal,verticalVal) and the intra-functional-block commands beforehand, whereas a ~~child-screen~~ OSD circuit 128 (as a functional block 8) does not have data on the correlations. Therefore, in this case, the upgrade data is transmitted to the ~~child-screen~~ OSD circuit 128.

Please replace paragraph 2 at page 99, with the following rewritten paragraph:

FIG. 33B shows operations of the control I/F 120d in each of the functional blocks. When power is applied at step ST11, the control section 120d2 sets to the register 133 in the CAN bus I/F 120d1 an identifier (ID) of upgrade data and an identifier (ID) of a common command, which are to be received by its own functional block upon activation at step ~~ST2~~ ST12.

Please replace paragraph 3 at page 100 continuing onto page 101, with the following rewritten paragraph:

When initial setting at the time of activation ends at step ST21, the control section 120d2 sets an identifier (ID) of a common command to be received in normal operations to the register 133 in the CAN bus I/F 120d1 at step ST22. For example, it sets "0xC" to the register in the U/V tuner 121, "0xA" to the register in the input selector 122, "0x0" to the register in the signal router 123, "0x5" to the register in the DRC circuit 124, "0x502" to the register in the noise removal circuit 127, and "0xC", "0xA", "0x5", and "0x0" to the register in the ~~child-screen~~ OSD circuit 128 (see FIGS. 29 and 30).

Please replace paragraphs 1 and 4 at page 102 continuing onto page 103, with the following rewritten paragraphs:

At step ST33, the control section 110B sets to the register in the CAN bus I/F 110A an identifier (ID) of last memory data sent from each of the functional blocks and wait for reception thereof. At step ST34, the control section 110B then reads the received last memory data of each of the functional blocks, that is, the last memory data stored in the receive message buffer in the CAN bus I/F 110A and saves it in a predetermined region (last memory) in the system control ~~control~~ program memory 110C. Then, at step ST35, the control section 110B turns off the system power.

According to this third embodiment, the control blocks 120A (the U/V tuner 121, the input selector 122, the signal router 123, the DRC circuit 124, the noise removal circuit 127, and the ~~child-screen~~ OSD circuit 128) convert any common commands sent from the system control block 110 into each of the intra-functional-block commands, if the common commands relate to its own functional block, to control the functional section 120e, so that each of the functional blocks 120 adaptively operate based on the common commands sent from the system control block 110, to enable obtaining the same effects as the above-described first embodiment.

Please replace paragraph 1 at page 104, with the following rewritten paragraph:

Although in the above embodiments, the image-signal-processing apparatuses 100, 100A, and 100B have been described which each comprises the U/V tuner 121 (as the functional block 1), the input selectors 122 and 122A (a the functional block 2), the signal router 123 (as the functional block 3), the DRC circuit 124 (as the functional block 4), the panel-dedicated processing circuit 125 (as the functional block 5), the digital terrestrial tuner 126 (as the

functional block 6), the noise removal circuit 127 (as the functional block 7), the ~~child-screen~~ OSD circuit 128 (as the functional block 8), etc., the number and the types of the functional blocks are not limited to these. Further, the number of slots is not limited to five, so that such a configuration may be employed that all of the functional blocks may be inserted into the slots, for example.